

ARKLOW HARBOUR.

REPORT

TO

HIS EXCELLENCY THE LORD LIEUTENANT OF IRELAND

BY THE

COMMISSIONERS OF PUBLIC WORKS IN IRELAND,

UPON THE

SPECIAL REPORT MADE UPON ARKLOW HARBOUR
TO HIS EXCELLENCY

By MESSRS. STEVENSON AND STONEY.

Presented in both Houses of Parliament by Command of Her Majesty.



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1886.

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STUDY OF THE EFFECTS OF

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THE

DUBLIN CASTLE,
19th January, 1886.

Sir,

I am directed by the Lord Lieutenant to transmit to you, to be laid before the Board of Works, the enclosed copy of the Report made to His Excellency by Messrs. Stevenson and Stoney, the engineers specially sent to examine and report upon the Arklow Harbour, in fulfilment of a promise given by the Government in the House of Commons, and I am to request that you will move the Board to favour His Excellency with their observations upon the Report.

His Excellency would, at the same time, wish to be furnished with an estimate of the cost of carrying out the recommendations made in the Report, and he would like to know whether the Parliamentary Vote is sufficient for the purpose, assuming that the recommendation for postponing the construction of the Pier at the north side of the river, to which the Local Authorities are opposed, were adopted.

I am, &c.,

(Signed),

R. G. C. HAMILTON.

The Secretary,
Board of Works, Dublin.

THE COMMISSIONERS OF PUBLIC WORKS IN IRELAND TO THE UNDER SECRETARY FOR IRELAND.

5,612.

Arklow Harbour.

OFFICE OF PUBLIC WORKS,
Dublin, 13th March, 1886.

Sir,

In reply to your letter of the *19th January last, I am directed to forward (*1397/86.) herewith a copy of the Board's Engineer's Report of the 8th inst., showing the cost which would be entailed by completing the Arklow Harbour, according to the recommendations of Messrs. Stevenson and Stoney, in their Report of the 8th January, 1886, and to observe that while accepting the result as shown by the contractor's tender, the Board are of opinion that it would be prudent to add £1,000 for contingencies, thus raising the estimate for the works (exclusive of £5,000 paid for acquiring the rights of the Wicklow Copper Mine Company) from £30,000 as provided for by the Arklow Harbour Act of 1882 (45 Vic., c. 13), to £40,500. If the northern groin be omitted, the total estimate, with similar addition for contingencies, would be £35,500.

As in the first case an additional sum of £10,500, and the second £5,500, would have to be provided for, the excess, should the Lords Commissioners of Her Majesty's Treasury see fit to sanction one or other of the schemes, would have to be provided for as laid down in section 5 of the Act, viz., by convening a special meeting of the Town Commissioners to declare their opinion as to the expediency of charging the rates of the town with the repayment of such further loan to be advanced by this Board.

In dealing generally with the subject of completing the harbour, the Board think it only due to themselves at this stage to point out that by far the greater portion of the excess outlay now estimated for is due to the method suggested by Messrs. Stevenson and Stoney of building up solid with deep foundations the last sixty feet in length of the work; if, however, as admitted, the section given by the Board's Engineer to the whole of the remainder, and no less exposed portion of the work is sufficiently reliable, they are unable to see why any charge of this character should be required at the head of the pier.

Without in the least impugning the high professional authority of the eminent Engineers who have reported on the work, the Board consider it right to state their preference for the section as designed by their Engineer, and which, if carried out, would only entail an excess of £2,000; or again, should the northern groin be rejected, would enable a saving of about £1,000 in all to be effected.

As regards this latter feature of the design, the Board are quite satisfied that its omission will leave the harbour greatly exposed, and will with time prove to be a grave error.

I have, &c.,

(Signed),

W. B. SOADY, Secretary.

The Under Secretary, &c., &c.,
Dublin Castle.

Enclosure.

REPORT OF THE ENGINEER TO THE COMMISSIONERS OF PUBLIC WORKS IN IRELAND

Arklow Harbour.

OFFICE OF PUBLIC WORKS,

Dublin, 8th March, 1886.

On the 26th January last the Board referred to me a letter from the Under Secretary to His Excellency the Lord Lieutenant, forwarding a Report from Messrs. Stevenson and Stoney, the Engineers specially sent to examine and report on Arklow Harbour, and with a request that the Board should favour His Excellency with their observations thereon.

I prepared and forwarded to Mr. MacDonald (the Contractor) plans and description of the works proposed, and having obtained an estimate from him, I now beg to submit the following Report:—

The total length measured along the parapet of the sea wall of the Southern Pier is 700 feet, and along the wharf wall 575 feet. During the year, 1885, the work was completed to within 120 feet of the Pier Head, the damage referred to in my Report of the 15th April, 1885 (printed by order of the House of Commons), was made good, and a large quantity of heavy concrete blocks and rubble was deposited at the base of the sea wall.

These measures were approved on inspection by the Consulting Engineers, who recommended that they should be carried out, and, where necessary, extended.

Although they do not give any distinct assurance that no further damage will take place, they trust that with the precautions suggested in their Report no serious injury will occur.

With the exception of this protection to the base of the walls, they do not suggest any improvement on the original design until within 60 feet of the Pier Head, beyond which, and for another length of 60 feet next it on the landward side, no works have as yet been executed. For this outer half of the work to be done, they recommend that the pier shall be constructed of one solid mass of concrete, founded at a depth of between 21 and 22 feet below low water. In the course of the investigation special borings were made at their request in order to ascertain at what depth a firm clay foundation existed, and it was ascertained to be from 37 to 38 feet below low water, a depth at which they do not recommend the pier to be founded, in consequence of the very large expenditure it would involve.

Mr. MacDonald, the Contractor, in submitting his estimate, does not undertake any responsibility in carrying out these additional works and stipulates that the quantities are to be ascertained as the work is put in.

It remains for me to report the cost of the completion of the works. The total sum provided (exclusive of the purchase of the rights of the Wicklow Copper Mine Company) was £30,000. To complete the entire works with the alterations and additions recommended by Messrs. Stevenson and Stoney will cost £39,500. If it be decided not to construct the Northern Groin the expenditure will be reduced to £34,500.

To complete the entire works according to original design, and with such protection as was anticipated to be necessary, when I reported in April, 1885, will cost £31,500 which may be called £33,000, so as to provide for any unseen contingency.

To complete same with the exception of the North Groin will cost £29,000.

It will be observed that the saving to be effected by abandoning the construction of the Northern Groin, is estimated at £5,000 in the case of the revised design, and only of £3,000 in the original one. The explanation is, all the blocks are made for the Groin and paid for, and a larger quantity of them will be used in the revised work (in substitution of heavy rubble) than in the completion of the original works.

(Signed),

ROBT. MANNING.